

REMARKS

Claims 1, 4, 5, 14, 15, 16 and 17 are pending in this application. Claims 2, 3, 6-12 and 14 have been canceled.

Claim 1 has been instantly amended to change the phenyl group content range (originally 10 to 90 mole %) of component (B) to "60 to 90 mole %". **Support** for this amendment is found in Example 5 of the present application (see Table 2 at page 88 of the present specification). As shown in Table 2 of the present specification, the component (B) used in Example 5 of the present application has a "**phenyl group/methyl group**" molar ratio of 60/40.

Advantages of the Present Invention

As shown in Table 2 of the present specification, the composition of **Example 5** (in which the "phenyl group/methyl group" molar ratio is 60/40) exhibits **excellent properties** with respect to the flame retardancy and Izod impact strength, as compared to the composition of **Example 3** (in which the "phenyl group/methyl group" molar ratio is 10/90).

Specifically, in **Example 5**, the evaluation of the flame retardancy is <sup>⊙</sup>, indicating **excellent flame retardancy** (wherein,

as described in the Notes for Table 1, the symbol  $\odot$  means "self-extinguished within less than 20 seconds"), and the Izod impact strength is 13 kg cm/cm. On the other hand, in Example 3, the evaluation of the flame retardancy is  $\circ$  (wherein, as described in the Notes for Table 1, the symbol  $\circ$  means "self-extinguished within 20 to 40 seconds"), and the Izod impact strength is 10 kg cm/cm. Thus, it is apparent that the composition of Example 5 (in which the "phenyl group/methyl group" molar ratio is 60/40) is superior to the composition of Example 3 (in which the "phenyl group/methyl group" molar ratio is 10/90).

The above-explanation of the advantages of the present invention has been provided to clarify the patentable distinctions between the present invention and the cited references.

U.S. 6,433,050 (US '050), JP 7-196871 (JP '871),  
JP 9-087504 (JP '504), Katayama et al. U.S. 6,111,016 and  
Bialous et al. U.S. 4,391,935

The following rejections are pending:

- (A) Claims 1, 4 and 16 are rejected under 35 U.S.C. §102(a) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as being obvious over WO 99/28387 (the Examiner is relying upon the disclosure of U.S. '050 as an English translation of WO 99/28387);
- (B) Claims 1, 4, 13 and 15 are rejected under 35 U.S.C. §

- 102(b) as being anticipated by, or in the alternative, under 35 U.S.C. §103(a) as obvious over JP '871;
- (C) Claims 1, 4, 5, 13 and 15 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP '504;
- (D) Claims 1, 4, 5, 13, 15 and 17 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP '504 in view of Katayama et al.; **and**
- (E) Claims 1, 4, 5, 13, 15 and 16 are rejected under 35 U.S.C. §103(a) as being unpatentable over JP '504 in view of Bialous et al.

Applicants respectfully traverse each of the rejections.

In order to distinguish from the cited references, Applicants have amended the process of claim 1 to recite that the flame retardant (B) contains a silicone compound having a linear configuration and that flame retardant (B) has phenyl groups in a concentration range of 60 to 90 mole %.

With regard to the anticipation rejections (A) and (B), the requirements for a rejection of a claim by anticipation, is stated in the Manual of Patent Examining Procedure (Section 2131) as follows:

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference (ref. omitted). The identical invention must be shown in as complete detail as is contained in the... claim (ref. omitted).

Accordingly, every element in a claim must be found in the reference in order that the reference anticipates the claim.

US '050 teaches a single linear silicone labeled "n" in Table 1. Silicone "n" is the only silicone in Table 1 which has no T or Q units. It is important for the Examiner to note that silicone "n" has a phenyl group concentration of 50 mole% which is outside the inventive range of 60-90 mole%.

With regard to JP '871, the Examiner states that example #1 anticipates the present claims since example #1 contains a poly(methylphenylsiloxane) labeled "TSF-437." However, it is important to note that TSF-437 does not have a phenyl group concentration within the inventive range of 60-90 mole%.

Therefore, neither JP '871 nor US '050 teach every element of the inventive claims, and as such, Applicants respectfully request that the anticipation rejections (A) and (B) are withdrawn.

With regard to the obviousness rejections (A) - (E), Applicants respectfully submit that a *prima facie* case of obviousness cannot be said to exist since the cited references fail to teach or fairly suggest: i) a process for imparting flame retardancy to a resin by adding a flame retardant (B) containing a silicone compound having a linear configuration and that flame retardant (B) has phenyl groups in a concentration range of 60 to 90 mole %; and ii) the

unexpectedly superior properties associated with the use of this particular flame retardant (B).

As noted above, none of the references teach an exemplified embodiment which contains a flame retardant (B) comprising a silicone compound having a linear configuration and that the flame retardant (B) has phenyl groups in a concentration range of 60 to 90 mole %. Applicants respectfully submit that this is a "teaching away" from the present invention. A reference which leads one of ordinary skill in the art away from the claimed invention cannot render it unpatentably obvious. *Dow Chem. Co. v. American Cyanamid Co.* 816 F2d 617, (CAFC 1987). In determining the scope and content of the prior art, and determining whether the prior art suggested the claimed invention, the references "must be read as a whole and consideration must be given where the references diverge and teach away from the claimed invention." *Akzo N.V. v. United States Int'l Trade Comm'n*, 1 USPQ2d 1241, 1246 (Fed. Cir. 1986); *In re Fine*, 5 USPQ2d 1596, 1598-99 (Fed. Cir. 1988).

At best, Applicants respectfully submit that the Examiner has established that it would be "obvious to try" the inventive process using a flame retardant (B) containing a silicone compound having a linear configuration and that the flame retardant (B) has phenyl groups in a concentration range of 60 to 90 mole %.

The courts have determined that the "obvious to try" standard does not meet the requirements for obviousness under 35 USC 103. *In re Tomlinson*, 150 U.S.P.Q. 623 (C.C.P.A. 1966). In *In re O'Farrell*, 7 U.S.P.Q.2d 1673 (Fed. Cir. 1988), the Federal Circuit gave some examples of what would constitute an "obvious to try" modification based on the prior art noting that "In some cases, what would have been 'obvious to try' would have been to vary all parameters or try each of numerous possible choices until one possible arrived at a successful result, where the prior art gave either no indication of which parameters were critical or no direction as to which of many possible choices is likely to be successful." (citations omitted).

Furthermore, assuming *arguendo* that a *prima facie* case of obviousness does exist, the *prima facie* case would be obviated by the unexpectedly superior properties of the present invention. As shown in Table 2 of the present specification, the composition of Example 5 (in which the "phenyl group/methyl group" molar ratio is 60/40) exhibits excellent properties with respect to the flame retardancy and Izod impact strength, as compared to the composition of Example 3 (in which the "phenyl group/methyl group" molar ratio is 10/90).

Therefore, it is believed that the instantly amended claim 1 has **novelty** and is **nonobvious** over the cited references taken in

any combination or in any respect. Accordingly, withdrawal of the obviousness rejections (A)-(E) are respectfully requested.

It is believed that the present application is now in condition for allowance.

#### Priority Documents

Applicants note that the Examiner indicates that none of the certified priority documents have been received. Applicants respectfully submit that the certified priority documents should be in the parent file 09/601,843, since the parent file is a 371 national phase application of PCT/JP00/00681 and copies of the certified priority documents are required to be forwarded from the International Bureau under PCT Rule 17.2(a). Applicants respectfully request that the Examiner indicates in the next communication that certified priority documents have been forwarded from the International Bureau in accordance with PCT Rule 17.2(a).

Reconsideration and early favorable action on the claims are earnestly solicited.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact **Garth M. Dahlen, Ph.D., Esq.** (Reg. No. 43,575)

Appl. No. 09/717,060

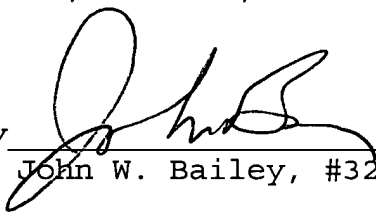
at the telephone number of the undersigned below, to conduct an interview in an effort to expedite prosecution in connection with the present application.


If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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